

What is claimed is:

1. A semiconductor wafer comprising:

a first principal side and a second principal side opposite to each other;

5 a first bevel contour and a second bevel contour provided at an outer periphery of the first principal side and the second principal side;

a first recess formed in the first bevel contour; and

10 a first type of ID mark configured by a protruding dot provided on a bottom face of the first recess.

2. The semiconductor wafer of claim 1, wherein an inclination angle of the bottom face of the first recess to the first principal side is in a range of 30° to 60°.

15

3. The semiconductor wafer of claim 1, wherein the first type of ID marks are formed displaced from each other in the thickness direction and the circumferential direction of the semiconductor wafer, at least at the bottom face of the first recess.

20

4. The semiconductor wafer of claim 1, wherein the first type of ID mark is provided at a flat part formed in the bottom face of the first recess.

25 5. The semiconductor wafer of claim 4, wherein the flat part comprises a minute dot group.

6. The semiconductor wafer of claim 5, wherein height of the minute dot group is equal to or less than 50nm, and height of a first dot is more than 100nm.

5

7. The semiconductor wafer of claim 1, further comprising a second recess formed at the second bevel contour and provided with the first type of ID mark at a bottom of the second recess part.

10 8. The semiconductor wafer of claim 1, wherein the first type of ID mark is provided at the first recess adjacent to a standard position at an outer peripheral part of the first bevel contour, and at a third recess on the first bevel contour of an opposite side of the first recess adjacent to the standard position.

15

9. The semiconductor wafer of claim 8, wherein the standard position is a standard sign showing a crystalline direction of the wafer.

10. The semiconductor wafer of claim 8, wherein the standard position  
20 is one of a flat orientation, notch and a seal.

11. A semiconductor wafer comprising:

a first principal side and a second principal side opposite to each other;

25 a first bevel contour and a second bevel contour provided at an outer peripheral part of the first principal side and the second

principal side;

a first type of ID mark of protruding dots provided on at least one of the first bevel contour and the second bevel contour; and

a second type of ID mark of recessed dots provided on at least one of the first bevel contour and the second bevel contour.

12. The semiconductor wafer of claim 11, wherein the second type of ID mark is displaced in the thickness direction and the circumferential direction of the semiconductor wafer from the first type of ID mark.

13. The semiconductor wafer of claim 11, wherein

the first type of ID mark is provided at a first recess adjacent to a notch at the outer peripheral part of the first bevel contour, and the second type of ID mark is provided at a part of the first bevel contour adjacent to the notch on the opposite side of the first type of ID mark with the notch interposed therebetween.

14. The semiconductor wafer of claim 13, wherein a standard position is a standard sign showing a crystalline direction of the wafer.

15. The semiconductor wafer of claim 13, wherein the standard position is one of an orientation, notch and a minute seal.

16. The semiconductor wafer of claim 11, wherein the first type of ID mark and the second type of ID mark are provided on at least one

of a flat part formed of the first bevel contour and the second bevel contour.

17. The semiconductor wafer of claim 16, wherein the flat part  
5 comprises a minute dot group.

18. The semiconductor wafer of claim 17, wherein height of the minute dot group is equal to or less than 50nm, and height of a first dot is more than 100nm.

10

19. A semiconductor wafer comprising:

a first principal side and a second principal side opposite to each other;

a first bevel contour and a second bevel contour provided at an  
15 outer peripheral part of the first principal side and the second principal side; and

an ID mark of shape having a ring-shaped depression around a center protrusion.

20 20. The semiconductor wafer of claim 19, wherein height of the protrusion is more than 100nm, and depth of the depression is more than 100nm.

21. The semiconductor wafer of claim 19, wherein the ID mark is  
25 provided at the second bevel contour.

22. The semiconductor wafer of claim 19, wherein the ID mark is provided on at least one of the first bevel contour and the second bevel contour.

5 23. The semiconductor wafer of claim 22, wherein the flat part is comprises a minute dot group.

24. The semiconductor wafer of claim 23, wherein height of the minute dot group is equal to or less than 50nm, and height of a distinct  
10 dot is more than 100nm.

25. A semiconductor wafer comprising:

a first principal side and a second principal side opposite to each other;

15 a first bevel contour and a second bevel contour provided at an outer peripheral part of the first principal side and the second principal side; and

an ID mark including a combination of a first protruding dot and a second recessed dot at a part of the first bevel contour.

20

26. The semiconductor wafer of claim 25, wherein the first dot and the second dot are arranged by reversed pattern.

27. The semiconductor wafer of claim 25, wherein height of the first  
25 dot is more than 100nm, and depth of the second dot is more than 100nm.

28. The semiconductor wafer of claim 25, wherein the ID mark is provided at a flat part formed on the first bevel contour.

5 29. The semiconductor wafer of claim 28, wherein the flat part is comprises a minute dot group.

30. The semiconductor wafer of claim 29, wherein height of the minute dot group is equal to or less than 50nm, and height of the first  
10 dot is more than 100nm.

31. A method for manufacturing a semiconductor wafer comprising:  
forming respectively a first bevel contour and a second bevel contour at an outer peripheral part of a first principal side and  
15 a second principal side of a wafer; and  
providing a ID mark to at least one of the first bevel contour and the second bevel contour.

32. The method of claim 31, further comprising, before providing  
20 the ID mark, forming a first recess in the first bevel contour;  
and wherein the ID mark is provided in a bottom face of the first recess.

33. The method of claim 31, further comprising, before providing  
25 the ID mark, forming a second recess in the second bevel contour;  
and wherein the ID mark is provided in a bottom face of the second

recess.

34. The method of claim 32, further comprising, before providing the ID mark, forming a third recess adjacent to a standard position of the outer peripheral part, and at part of the opposite side of the first recess adjacent to the standard position;

and wherein the ID mark is provided in a bottom face of the third recess.

35. The method of claim 31, further comprising, before providing the ID mark, providing the third type of ID mark for at least one of the first bevel contour and the second bevel contour;

and wherein the ID mark forms a flat part.

36. The method of claim 31, further comprising:

when the ID mark formed is an error ID mark, the error ID mark is turned into a flat part by irradiating laser; and

providing a new ID mark on at least one of the first bevel contour and the second bevel contour.